GARY R. HERBERT
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Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

April 12, 2010

Western Utah Copper
1208 South 200 West
PO Box 492
Milford, Utah 84751

Subject: Review of Amended Notice of Intention to Commence Large Mining Operations, Western Utah Copper, WUCC Copper Mine, M/001/0067, Beaver County, Utah

Dear Mr. Wunderlich:

The Division has completed a review of your Amended Notice of Intention to Commence Large Mining Operations for the WUCC Copper Mine, which was received March 15, 2010. The attached comments will need to be addressed before an approval may be granted. Please ensure the amendment is accurate and complete with regard to current intentions for tailings disposal. Please provide an accurate plan for the storage and treatment of the tailings and changes to the large mining plan, updating the plan and figures accordingly.

The comments are listed under the applicable minerals rule headings. Please address only those items requested in the attached technical review by sending replacement pages of the original mining notice using **redline and strikeout** text.

The Division will suspend further review of the Notice of Intention until your response to this letter is received. If you have any questions in this regard please contact me at 801-538-5261 or Tom Munson, at 801-538-5321. Thank you for your cooperation in completing this permitting action.

Sincerely,

Paul B. Baker
Minerals Program Manager

PBB:tm:vs
Attachment: Review
cc: ed_ginouves@blm.gov
P:\GROUPS\MINERALS\WP\M001-Beaver\M0010067-WUCC\final\Amend-3435-03152010.doc

REVIEW OF AMENDED NOTICEOF INTENTION
TO COMMENCE LARGE MINING OPERATIONS
Western Utah Copper
WUCC Copper Mine

M/001/0067
April 12, 2010

R647-4-105 - Maps, Drawings & Photographs

General Map Comments

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
1		Figures throughout the plan need to be updated to incorporate the recent amendments. The figures that exist in the approved plan need to be replaced or corrected to accurately reflect what's been changed on the ground.	TM	

105.2 - Surface facilities map

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
2	Site Plan detail Sheet 1 of 1	These figures do show the additions to the plan like the new 100,000-gallon water tank, the new 300,000-gallon water tank, thickener tanks on the mill building, and construction material storage area. These figures show the accurate locations of these facilities but do not show the disturbed area that relates to reclamation responsibility or the disturbed area boundary. Please show the new disturbed acreage for these improvements. Figure 2 received in the 2005 approved plan shows the tailings repository and other associated disturbances. This figure and other figures in the approved plan need to be updated to show any additional disturbance created or deleted since the permit was last approved. Include all disturbances to date and any future proposed disturbance.	TM	
3	All figures	Figures need to be updated to incorporate the recent amendments. The figures that exist in the approved plan need to be replaced or corrected to accurately reflect what's on the ground.	TM	

105.3 - Drawings or Cross Sections (slopes, roads, pads, etc.)

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
4		Please provide cross sections of the tailings pond on 200-foot centers. The cross sections need to be drawn to scale and should be at a scale of 1 inch equals 100 feet.	WW	

R647-4-106 - Operation Plan

106.2 - Type of operations conducted, mining method, processing etc.

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
5	8 paragraph 2-3	No mention of rougher or of scavenger cells.	TM	
6	8	No mention of the use of potassium amyl xanthate as principal collector/promoter. No mention made of use of sodium hydrosulfide (NaHS) as a sulfidizing agent in the original plan (appendix 3) or amendment. Please correct these discrepancies.	TM	
7	8	The plan says, "Only minor amounts of reagents that remain in the tailings" [incomplete sentence]. In the material processed to date, it is unlikely that only minor amounts of reagents remain in the tailings. A substantial fraction of the promoters has likely been bound to the slimes fraction of the milled material and is reporting to the tailings. How will this impact the groundwater?	TM	
8	9	"Floatation reagents will be removed from the mill tailings before they are transferred to the tailings pond." How is this being done?	TM	
9	14	"During the milling process, the copper minerals will collect in the concentrate." While this is certainly the goal of the milling process, it has largely not been achieved to date. Most of the copper minerals have actually reported to the tailings in the material processed to date. How is this affecting groundwater and have samples of the tailings been taken?	TM	
10	General	Information submitted to the Division of Water Quality will need to be incorporated into the mining plan if it is considered pertinent to the operation and reclamation of the mill and tailings.	TM	
11	Page 10, Para 3	Previous discussion indicates that the excavated ponds would be used for tailings. In this paragraph it appears that a new tailings pond will be constructed. Is this in addition to the current excavated ponds?	LK	

106.3 - Estimated acreages disturbed, reclaimed, annually

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
12	Table 1	Acreages are contradictory in the new amendment and are not shown on an updated figure referring back to changes to the acreages in Table 1. Table 1 submitted in Dec 2008 gave different acreage figures. The new disturbances need to be clearly shown on a map with the acreages corresponding to Table 1 and the bond calculations. Please correct these discrepancies.	TM	
13	Table 1	There is no acreage for reclaiming the Hidden Treasure Pit on this table. All areas re-affected by mining need to be covered in the reclamation plan. Please correct.	LK	

106.4 - Nature of materials mined, waste and estimated tonnages

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
14		The amount of tailings generated has not been accurately identified. What is the life and capacity of the new tailings pond? Please provide realistic projections.	TM	

106.5 - Existing soil types, location, amount

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
15	Page 4, Para 5	What is the estimated volume of soil material that can be salvaged from the expansion of the Hidden Treasure Pit? Where will this soil be stockpiled? How will it be protected?	LK	
16	Page 9, Para 4	How much soil was salvaged from the tailings pond facility? Show location of the topsoil stockpile on a map.	LK	
17	Page 24, Para 6	Approximately 63,725 cy of soil should be salvaged from the expansion of the Hidden Treasure Dump. This soil needs to be accounted for, and stockpile location(s) shown on the map.	LK	

106.6 - Plan for protecting & re-depositing soils

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
18	Page 9, Para 4	Soils in the tailings area have already been potentially contaminated and may not be available for reclamation. Please provide a plan that identifies the extent of soil loss (due to impact from the tailings), and how and where soil resources will come from to mitigate this loss.	LK	
19	Page 9, Para 5	Language here leads one to assume the topsoil for this area has already been salvaged. As such, the volume should be known. Likewise the amount available to re-apply would be known as well as the thickness of application (6-12 inches is a doubling of the lesser application).	LK	
20	Page 10, Para 2	Refer to previous comment. If 12 inches of soil is salvaged, then 12 inches of soil would be available for application at the time of reclamation.	LK	
21	Page 15, Para 5	Please be specific as to where topsoil stockpiles will be located. Stockpile location can have a significant impact on reclamation costs (and bond requirements).	LK	
22	Page 15, Para 6	Regarding to the seed mix to be used for stabilizing topsoil stockpiles, please consider reducing the amount of hycrest crested wheatgrass to 1 lb/ac., and add either alfalfa (ladak) at 1 lb/ac or yellow sweetclover at 0.5 lb/ac.	LK	

106.9 - Location & size of ore, waste, tailings, ponds

omment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
23	Figure 9	The location of the tailings pond should be shown on Figure 9.	WW	

R647-4-107:

These rules are performance standards, and plans specific to these rules are not required for permitting. However, the Division suggests that you plan to monitor and control noxious weeds on the State noxious weed list, and not just the ones on Beaver County's list.

R647-4-109 - Impact Assessment

109.1 - Impacts to surface & groundwater systems

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
24		The plan fails to identify the ground water impacts associated with the current practice of putting wet tailings directly on the ground and its impact to groundwater. Please provide a recent analysis of the tailings and provide the most current reagents being used in the mill and the concentrations of these reagents left in these tailings. Any information submitted to the Division of Water Quality related to the tailings disposal will need to be included in the plan.	TM	
25	11	The reference to the UPDES construction storm water permit is an incorrect reference; please change to the proper terminology.	TM	

109.3 - Impacts on existing soils resources

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
26		Please account for impacts to all soil resources. Document the approximate volume of soil that will be impacted, salvaged, and re-applied during reclamation.	LK	

109.5 - Actions to mitigate any impacts

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
27	Omission	If applicable, please discuss plans to replace or otherwise mitigate the loss of soils impacted by the improper discharge of tailings.	LK	

110.2 - Roads, highwalls, slopes, drainages, pits, etc., reclaimed

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
28	Page 28, Para 4	Please plan to seed the safety berm with the permanent seed mix. Leaving it to revegetate naturally is not acceptable.	LK	
29	Page 28, Para 5	Please provide results of a soil analysis, including pH, EC, CEC, SAR, texture, % organic matter, total nitrogen, nitrate nitrogen, phosphorus (as P_2O_5) and potassium (K_2O). This is needed to determine what type and amounts of fertilizer and soil amendments may be needed to establish the necessary vegetation cover.	LK	

110.4 - Description or treatment/disposition of deleterious or acid forming material

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
30		Please provide an up to date list of processing chemicals.	TM	
31	Page 28, Para 7	The first paragraph on page 20 discusses flotation reagents, other process-related chemicals, and sulfuric acid as potentially deleterious materials. These products would constitute potential deleterious materials. It is therefore necessary to discuss the treatment, location and disposition of these materials.	LK and TM	

110.5 - Revegetation planting program

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
32	Page 29, Para 1	Please provide a soils balance sheet that identifies the amount of soil material that has been, or will be salvaged, the areas from which it was salvaged, and the amount of soil in each stockpile. Note, if soils have been contaminated by tailings, it likely will be necessary to find borrow material to make up the loss. The balance sheet will need to identify the amount of soil material impacted in this area that will need to be replaced.	LK	
33	Page 30, Para 1	If broadcast seeding is completed immediately after seedbed preparation, use of the sheep's foot compactor would not be needed. Use of the roller is discourage since it would tend to reduce surface roughening.	LK	

R647-4-112 - Variance (List all variances requested and make a finding if approving.)

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
34	Page 31, Para 3	A variance is requested for topsoil redistribution in the pit and on the safety berm. The variance request is incomplete in that no alternative methods are proposed nor information about how the intent of the regulations (regarding reclamation) will be met. With regards to the pit where a previous variance had been granted (not the pit expansion area), since there was no soil to begin with, there is no soil to replace and a variance is not needed. However it is expected that the materials left on the pit floor will be ripped to alleviate compaction, fertilizer and/or soil amendments such as composted manure or biosolids be applied, and the area seeded. The safety berm is expected to be a long-term structure, and it therefore needs all reasonable measures to ensure its long-term integrity. This would include replacing topsoil to support a permanent, diverse vegetation cover that will prevent erosion of the berm. Until the operator can demonstrate that the intent of the Act and regulations can be achieved, this variance is **not approved.**	LK	
35	Page 31, Para 4	A variance is requested on reseeding the pit and pit safety berm. This request is also incomplete in that it does not provide rationale for the variance, alternative methods to be utilized, nor does it demonstrate how the intent of the Act and regulations will be achieved. While a variance for meeting the revegetation standard may be warranted, the deficiencies listed above must be provided for Division review and analysis. At this time, this variance is **not approved**.	LK	

R647-4-113 – Surety

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
36		The Division is now using a standardized format for bonding. The operator should convert the existing bond calculations to the new format. The Division has supplied the forms for bond calculation. For the current amendment, the Division will review the calculations provided.	WW	
37		The acreage calculations shown on Table 1 are not accurate and fail to incorporate certain amendments to the plan. Please update this table and the bond calculations.	TM	
38	Page 12	The NOI states that surety has closure cost for two wells. There is a third well that is not included in the costs.	TM	
39	Page 32	Please provide details for the surety calculation, including volumes, acreage, etc., and unit costs for each step in the reclamation process (refer to first comment in this section).	WW	